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Towards CREATIVE SELFEDUCATION (Synopsis)

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Moshe D. Caspi, 1983

Towards Creative-Self-Education - M.D. Caspi (Synopsis)

Creative-Self-Education (C.S.E.) is a very broad and open methodology which may be used individually and/or in groups, in many ways. This methodology creates inter-relationships between several domains of life which often tend to be treated as separate. Professions in education, science, technology, the arts and recreations become isolated because they lack a common language, and thus hinder communication and full personal development.

The C.S.E. methodology is adaptable to all these fields, and to all ages and cultural levels, because it forms and uses objects, practical artifacts, spaces, images, ideas and concepts common to all domains of life, yet specific to each specialization, and thus enhances optimization of our lives.

Up to now, C.S.E. has developed as an extension of "Education" into new dimensions. Basically its construction is such that it enables one to start from one's own particular strong points and level. Thus, obsolete and ineffective functions of training and education can be replaced. Change is allowed to occur because C.S.E. gives each person, family, group or organization the means to decide for themselves what modifications are to be made, how they are to be brought about, and when they are to be implemented.

C.S.E. as proposed here is a transitory approach, acting as an intermediary between, on the one hand, existing modes of formal education, professional training, and modes of leisure, play, etc., and on the other hand, some utopian state of the world as a creative-self-educative super-system.

C.S.E. consists of six integrated sets of components:

- i Possible dimensions of awareness and activity called "Spheres".
- ii Actual and imagined spaces called "Everywhere" in which the process of C.S.E. may start.
- iii Integrated modes of functioning and being, called "Creative Events".
- iv Systematic models of C.S.E. considerations, called "EDCOM" (Educational Combinatorics).
- v Personal means for realizing C.S.E., called "Vital-Self-Instructions".
- vi "Stages" of development called "unfolding" (the dynamics of C.S.E.)

C.S.E. and each of its six components can function and be presented in almost any form, for instance: graphics, drama, architecture, computer programs, video, television, mathematics, technology, music, scientific experiments and demonstrations, kinesthetics, science fiction, circus, gastronomic experiences, cinema, etc. (See picture 1).

Picture 1: "Forms of presenting C.S.E." - During the last fifteen years, we have developed, with various groups of experts, some parts of C.S.E. in the forms presented in this picture, plus a 20 minute colour film. A basic assumption of C.S.E. is that we must not limit ourselves to verbal conceptualization and presentation of methodologies, since different people perceive and are receptive to different modes, functions, and learning media. This and the other pictures, taken from big posters which were used as working aids, contain much more verbal and visual information than can be presented on a page. (For publication purposes, much simpler graphics will be provided). The pictures belong to different "periods" of our work, and therefore some of the labels and even parts of the structures and models differ from those given in our text, but basically they convey the same ideas. The captions in most of the pictures are in Hebrew and English. Viewing the pictures and looking at the cross-references in the text may help one to better appreciate the interdependence and interaction of the various components of C.S.E.

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מתודולוגיה מתפתחת ומתכללת AN INTEGRATIVE, UNFOLDING METHODOLOGY

M.D [ASPI

GRAPHIES: 5. KWELLER

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מוסיקלי, במב"י:(בנה משהו נמו ידיך), ספרותי שרותות ובמב"י:(בנה משהו נמו ידיך), ספרותי במב"י:(בנה משהו נמו ידיד) מפרותי במב"י: (בנה משהו נמו נמו ידידונותי, וידאונותי בוראונראפי, נסטרונותי, וידאונוים במחודת במודת במחודת במחודת במחודת במודת במודת במחודת במחודת במחודת במחודת במחודת במחודת במחודת במחודת במודת במחודת במחודת במח

I "Spheres"

Although the total sphere of consciousness exists on a multitude of levels simultaneously, at any given moment our state of awareness tends to focus upon one of these many levels. For purposes of clarification, these may be divided into four classifications:

- a) The "Egosphere" whatever you may know to be part of yourself
- b) The "Sociosphere" the collectivity of your actual and symbolic social transactions.
- c) The "Ecosphere" the interwoven support systems for all forms of life.
- d) The "Cosmosphere" this includes all potentials.

It should be understood that each sphere includes the preceding ones, while at the same time the awareness of each sphere can expand to include further ones.

See picture 2: The concentric circles are one way of presenting the Spheres. Different people organize — consciously or otherwise — their "spheres" around one or several foci, such as: aesthetic-plastic, technological, literary, scientific, practical-administrative, social-political, etc. But each sphere may contain all the "spaces". See also "Dimensions" in picture 7.

II "Everywhere"

These actual and imagined spaces embody most creative modes of individual and social functioning. Here, self-education entails entering, experiencing and becoming so familiar with these spaces, their functions and interactions, that one is able to move freely through them and between them, to the extent that they are experienced as a unified totality. They can therefore be used with a fourfold purpose:

Firstly, when we <u>approach</u> a new space its function is to overcome anxiety due to resistance to and ignorance of the new and unknown. Secondly, when we <u>enter</u>, its function is to dissolve habitual stereotypes and prejudices concerning that specific space.

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Picture 2 - "Everywhere"'s Rationale

Thirdly, when we experience the new space, its function is to enable us to acquire skills necessary for coping with the modes of existing and working in this space, beginning with the arousal of wonder, curiosity and inquisitiveness. Fourthly, when we leave, in order for us to be able to reenter any space flexibly and freely, its function is to help us to internalize the experience gained into more permanent means of recognition, allowing the process of learning-working-creating to take place everywhere and at all times.

These spaces and their interaction can be characterized in the following manner (see picture 2). In the centre we can place the space called "updating the present", in which one experiences one's present state and its continual transformation. Around this, like spokes of a wheel around the hub, we place ten other spaces. Thus one must always pass through the continual updating of the present, in order to move from the experience of any one of these spaces to any other. This can be done with or without guidance (such as computer, "maps", etc.) and either alone, or in a group. We can now place spaces which function in a complementary manner, upon opposite poles. Thus, we can place on a time-flow dimension the space "Excavating the past" upon one spoke, so that it is necessary to pass through "Updating the present" in order to reach "Projecting the future". We can place the remaining eight spaces on the basis of four other dimensions: "Fantasy" and "Elaboration" on a dimension of production and implementation of ideas; "Senses" and "Planning" on the dimension of spontaneity-deliberation; "Social" and "Personal" as another basic dimen-sion of life; "Other Spaces" and "Anti-spaces" leading to "Super-spaces" as a dimension of possibilities.

This "wheel" (there might be other arrangements) of eleven spaces (there might be more, or less spaces) can, of course, be entered at any point, depending on the needs and interests of the group or the individual, and thus the possible combinations for approaching and dealing with any given problem/topic number $11! \approx 40$ million.

"<u>Fantasy</u>"

This is the space in which to let oneself go without constraint; to abandon the probable and the known; to make new connections and overcome one's fear of limitations. Here can be found humour, play, and crazy ideas.

"Right-cerebral" functions are unrestricted. About sixty techniques for the production of new ideas are suggested here, and everyone can choose which of these are the most suitable for him/her.

This space is full of three-dimensional models, bigger than real life creatures, huge and tiny gadgets, old and new games, interactive exhibits, strange personal computers, mobiles, and many only partially constructed devices, niches and corners, demanding improvization and development from the explorer.

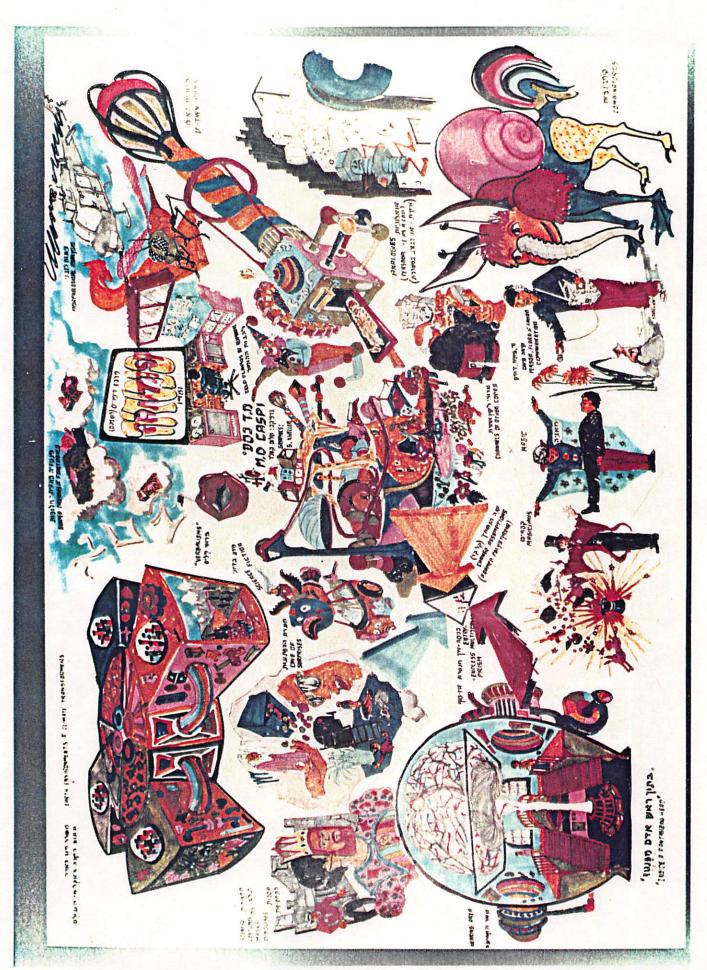
A variety of models, tools, "aids", etc., in addition to specific architectural structures, form part of this and each of the other spaces.

Picture 3: "Some models of the Fantasy space" - The centre is one of the "fantastic" forms of the fantasy space itself. Its scale can be comprehended by comparing it with the combinatorics "donkey" (about 2.5 m.) Included here are about one third of our fantasy models: some are based on verbal expression, some are sensor-motor ("If-then" pipes), some constructive ("Environment and climate transformers" - in which one builds one's own desired space to facilitate one's productiveness). Some "corners" are risky, others funny; some utilize elaborate techniques of creativity (e.g. "Morphological Analysis" for the systematically minded, or "Synectics" - presented here by the "cog" - personal analogy for the more intuitively minded), others use theatrical devices, humour, etc.

"Elaboration"

In this space the experiences gained in the fantasy space (and other spaces) are tied to the demands of reality by "left cerebral" activity. Abstract ideas connect and organize fantasy to facilitate its realization.

Here we define, select, rank in order of importance, crystalize into patterns, and elaborate seed ideas in order to construct and transform the Ecosphere, the Sociosphere or the Egosphere in one or more of their modes of existence. Conversely, the work done here and its concrete products can be allowed to fly free in Fantasy.



Disture 2 Same models of the Eantasy space

One may be engaged here in Logical elaboration or Technological elaboration; Literary elaboration or Artistic elaboration; Past or Future elaborations, etc.

Picture 4: "An example of Technical Elaboration" - A turtle and a wooden cart are slow. "Columbia" is very fast, and in several more steps we will reach the speed of light. Between these two extremes are various vehicles of varying degrees of speed. But at every stage of increasing speed there are also other considerations, some of them summarized in a "Performance-Assessment Grid" (the hexagon under the caption "Is your Product?" shown more clearly in Picture 9). In the centre are five kinds of "elaboration": a seed growing into a tree ("nature's elaboration"); letters (or units) growing into "Ideas" (thinking); a recipe becoming a cake (practical); a piece of coal becoming a diamond (technical); and reflective elaboration (camera and picture). The "learning" and "performance" levels are presented somewhat more fully in picture 9. The full Elaboration space includes many kinds of Performance-Assessment-Grids (enabling one to guide one's action as well as to evaluate it), and many vitalself-instructions, like the twenty V.S.I. scattered throughout this picture (e.g. "think like a poor person.."), are incorporated into models, exhibits, "tasks" etc.

"Senses"

Here the focus is upon the experiencing of the phenomenon at hand in all its possible sensory modes. Immediacy, spontaneity, simplicity, emotional and motor responses are encouraged. Inferences, categorization, and critical evaluation are discouraged here. The mind is emptied of all preconceptions and fixed patterns. A childlike state of preverbal empathy is enhanced, in which one's awareness of sensory input becomes the raw material for experiencing the world. This space constitutes the celebration of existence and the foundation of creative endeavour.

"<u>Planning</u>"

This is the space of "what for?" and "How?" Here, every experience gained in the other spaces is transformed into a purposeful plan. "Left" and "right" cerebral hemispheres, reason and feeling, are all active here. Aspirations become possibilities, perceptions become deliberations, and these in turn become resolutions. Here, the criteria necessary for evaluating degrees of success are built into the plans.



"Homo Sapience" is busy here, constructing the intellectual tools whereby one's aims may be realized (with the aid of various models drawn from all sciences and professions).

"Excavating the Past"

This space is not merely a store of past information, but a laboratory of active searching. Here one finds the essence of the many ways, techniques, and approaches for discovering the roots of the problems and phenomena in which one is interested. (All the sciences and disciplines contribute - not just archeology and history). One learns to identify and experience the basic influences of the past; to inter-relate them in different ways (chronologically, causally, genetically, analogically....) to personalities, events, ideas, institutions, etc.

One is helped to avoid determinism, anachronistic thinking, over-romantization and mythologization of the past.

"Updating the Present"

This space is present in all the other spaces. It is the constantly changing meeting place for all the spaces (see picture 2 for five different "presents"). Things actually happen here. When we consciously enter this space, we try to intensify the immediate quality of living here and now, without overdependence on the past, and without too much fear of or exagerated hope in the future. One experiences curiosity, a critical awareness of what is going on, an intuitive grasp of big, basic patterns and the relationships between all entities, a wider comprehension of the unity of all the spheres. One becomes more sensitive to the physical, emotional, intellectual and social processes taking place. One learns the skills and techniques of selecting, collecting, organizing, documenting, evaluating, communicating and retrieving the best and most relevant available impressions, intuitions, symbols, signs and signals.

One also learns to recognize and use updating instruments and gadgets. At the same time one learns to avoid the dangers of not seeing the present for the details, of postponing action because of sparseness of updated data, etc.

"Projecting the Future"

This space helps us to envisage and design a realistically optimistic extrapolation into the future. It should help us to develop a broad spectrum of future plans on personal as well as social levels.

Here one learns the meaning and use of 'Extrapolation Models', one works from multiple points of view, assumptions, and various kinds of weltanschauung. In addition, one indulges in an increased measure of intelligent guess-work, reasonable risk-taking, and open-mindedness towards what is possible.

"Social"

Here one gets a chance to develop some of the most important social sensitivities, attitudes and skills essential to family life, working and learning groups, political and economical organizations, public behaviour, and mass communication. This space is constructed in such a way that the hardships experienced in going through our various social roles and functions are minimized, and our joy, social well-being and humaneness are optimized.

The roles and functions encouraged are: a capacity for leadership and initiative, as well as the ability to obey and follow others when appropriate; the ability to cooperate with one's equals; the ability to communicate with different people in various fields and in different ways.

This space is intended to cope with what is the most difficult part of social behaviour - that of having to change from one role to another with intelligent ease, thus achieving a "dynamic social balance" and increasing our social flexibility.

Picture 5: "The Others' Choices"- This is one of a series of "social games". It is intended to help us to know other people better, increase group understanding and cohesion, and construct a more realistic self-image (derived from friends' feedback). It starts off with couples "learning" the twelve junctions in different landscapes and environments (or sociospheres and ecospheres). Each person writes down which route s/he thinks the other would choose at each junction, and why. They then exchange their answers, (speculations, guess-work and reasoning). The game is then repeated in groups of four: each of the couples try jointly to guess the other couple's choices. The amount of social and personal insights increases in quite an astonishing way.

"Personal"

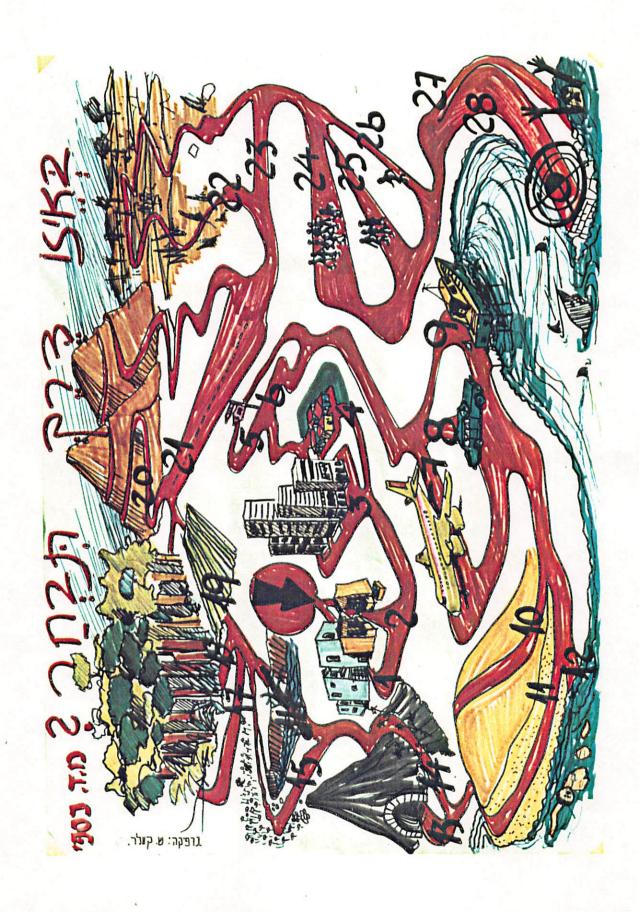
This reflective space is a most diverse and unpredictable focal point, because it is here that one reconstructs one's <u>own</u> "environment" fully. Major functions stimulated here include: crystalizing in one's own eyes the idea of who one is, what one feels, thinks, knows, wants and maintains as a self-image; what one is capable of doing; where, and with whom, one is living. Attention is focussed upon integrating all personal experiences.

Other Spaces

Each person, according to his or her vocation, background, special needs and interests, constructs and uses additional spaces that he or she personally feels are necessary, e.g. "Search spaces", "Transformation spaces", "Relaxation spaces", "Nowhere spaces", "Love spaces", etc.

Picture 6: "Constructive Gaia" (a changing Ecosphere) - One of our working teams, comprised of geographers, town-planners, musicians, botanists, engineers and others, elaborated some parts of the "Environment...transformers" model (see picture 3) and produced an evolving space called "Gaia" ("mother earth"). This model (with a diameter of 4 metres, height of 2.5 metres, 1 metre pipes, and constructed with iron frames), can comfortably house 6 - 10 persons who can construct their chosen space with or without:

- 1) specific instructions for each person or the whole group;
- 2) contradictory elements to overcome fixed patterns of approach e.g. a desert landscape (drawn on a huge moving screen) versus snow (pipe 1), home smells, (pipe 2) and a watery base (the round construction on which the boy in the picture is standing);



- 3) Accurate scientific reproduction of a past or present environment, based on research, and including all basic geological, climatological, architectural, archeological, botanical, zoological, musical etc. components of that specific space. Astronomical, biological and other spaces (embodying problems, flows of energy, obstacles etc.) can be constructed;
- 4) Imaginative-creative new kinds of spaces, including the construction of "my optimal personal space".

The many stages and kinds of assignments possible for using the basic constants (frames, landscapes, flora and fauna, houses, clothing, the pipes for heat, humidity, sounds, smells, etc.) to construct various environments are applicable to many fields of study/work/recreation, in a nearly infinite number. Each person can select those aspects or problems that s/he wants to cope with, and the group makes use of every talent.

"Anti-spaces", leading to "Super-spaces"

These spaces, difficult to build, are intended to help us to seek out and encounter those negative points in our lives that we try to avoid; to live experiences which are opposed to the comfortable and the usual; to meet people whom we would usually disregard; to visit areas normally shunned, for reasons of fear, antipathy, etc. Here we have the most difficult task of transforming the "world of the shadow", (inhabited by Ahriman, Satan, Kali and their lot), into "Super-spaces", by bringing these beings into the "light", where they can be seen to have become the gods and godesses of a creative world (in which dwell Zeus, EL, Vishnu, Athena and their companions). This is the challenge of optimization.

The spaces of Everywhere are not just theatre; they are not purely functional, or simply places to dream in, nor are they merely beehives or factories. They are not owned by us or by outsiders, nor are they either physical or abstract - they are all of these things.....and all of them form, among other things, the playground and/or battlefield for Creative



III Creative Events

"Events" are intensified highlights of fundamental life situations. These can range from situations focussing on one trait, or on a single individual, to those involving groups, societies, the human collective, and life itself.

An event can have any subject for its basis, from the most mundane to the most profound, and can give extraordinary hints of the "impossible possible". Events are rooted in the ideas and concepts of the autonomous functioning of individuals, the democratic evolving society, and the open-minded philosophies and ideologies which advocate self-orientation and self-regulation. The event can open up new areas of awareness and synthesize these with older models, habits and techniques that one wants to retain. It is also intended to lead to new manual, verbal, aesthetic, mental, social and instrumental skills and their optimization. It can enhance self-recognition and the ability to give and receive feed-back. It aims to unfold the urge and develop the tools necessary to create, and to integrate all the experiences into a meaningful whole, also operating outside the concrete event.

Here, then, are the six basic kinds of Creative Events we have developed, each a special group of experiences with its own flavour. Any and every theme may thus become reflected in each of the kinds of events, transformed into a new learning-working-playing experience.

- The Opening Event on the one hand provides a general orientation for the topic, and on the other hand presents two or three specific aspects of sub-problems for deeper scrutiny.
- 2) The Instrumental Event deals with the new skills, rules, attitudes, involved in the new problem or theme. Practical experience is gained personally on different levels (see "Unfolding").

- 3) The Reorganizing Event aims to assist one in bridging the gap and overcoming the discrepancies between the already known and the new.
- 4) The Awareness and Feedback Event is a reflective and emphatic kind of learning on the way to becoming more receptive and developing a more realistic self image. It is also a social and communicative means of increasing group cohesion and cooperation.
- 5) The Optimizing Event is the dynamic set of dramatic, technical, intellectual and other means by which the "Elaboration Space" (and also, to a lesser extent, other components of C.S.E.) realizes its most important goal: transforming an obstacle into a challenge, leading to optimization (see picture 4 for some examples of uses scattered around).
- The Integrative Event is the ultimate event. It should assist the widening and deepening of our living in the "Spheres", "Spaces", etc. Minimal integration involves some aspects and experiences of all of the five kinds; maximum integration is that of the personsociety-environment-cosmos from any conceivable point of view.

An event may last in the first instances from a few minutes or hours to a few days, while eventally, when mastered, creative events can last a lifetime.

Any creative event has two elements, which may appear in any possible combination, and these are:

a) "Activity", that is, any conscious, specific, deliberate action - motor, verbal, gastronomic, etc. - such as eating a cake, blowing a whistle, analysing, defining a technical term; etc. (sometimes underestimated in recreation). b) "Occurrence", the often vague awareness of a change in one's inner state, spontaneous and non-deliberate, such as breathing, associating ideas, having intuitions, feeling, gaining insight, etc. (usually ignored in formal education and training).

These two elements, the specifically designed and integrated set of "activities" and "occurrences", make up an "episode: the outwardly observable flow of one situation. For example: searching for new sounds in "we invent another language"; a dialogue in "we transform a computer into a human being and vice versa"; getting materials for "we design and build our dream-house", etc.

A complete event - several integrated episodes - can be organized with the following phases borne in mind:

First - what do we want? Pinning down the explicit, outstanding problems, issues and motivations (which may be peripheral to the unspoken, implicit, possibilities of which we are not yet conscious, which are inherent in the event, and which may reveal themselves later).

Second - how do we do it? Planning policy, making a preliminary "script", roles, stage-set, scenes, etc. in the form of "who does or undergoes what, where, when and how?" in the spaces of "Everywhere". An ongoing elaboration of the first draft.....preparations......(see picture 10).

Third - we do it! Performing and experiencing what has been planned and prepared. Here and now those possibilities which have been implicit, inherent and most likely unsuspected may emerge as unplanned episodes and variations (serendipity - watch out! these may well be the hidden treasure).

Fourth - what happened? Relating (more than evaluating) and feedback - expressing our experience (not just, or even mainly, verbally).

Fifth - how shall we do it this time? Improving, adapting to different needs, ages, and cultural levels, incorporating, making explicit the implicit, etc.

Sixth - what does it mean to me? Integrating all that has been happening in the various spaces and "stations" during the whole event, into the present flow.

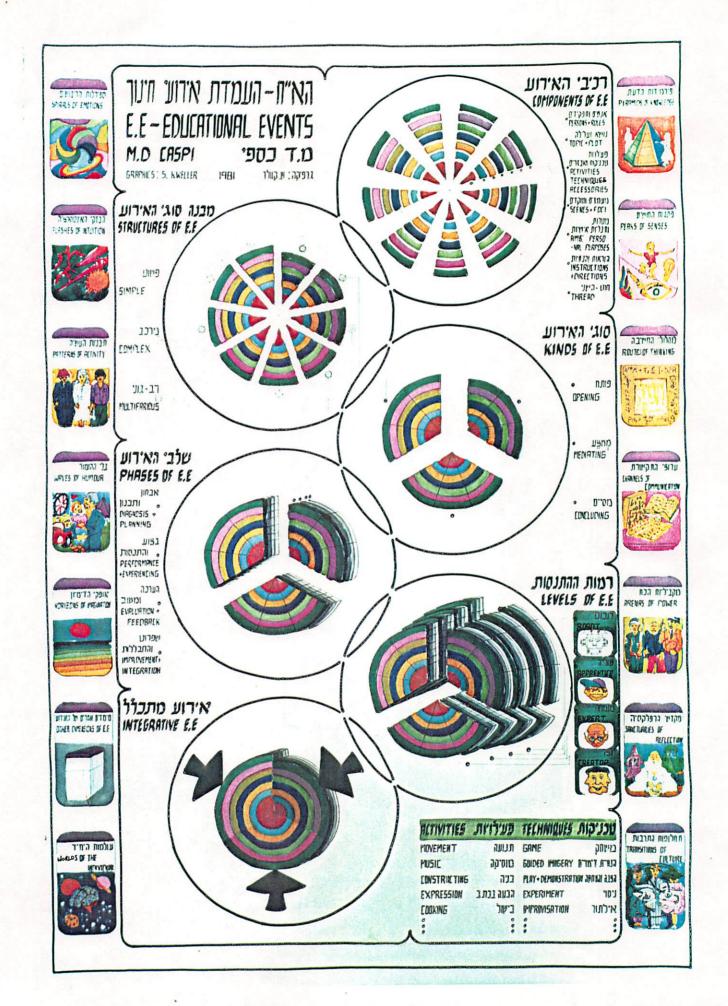
No participants in a creative event remain bound by any roles which they may have assumed. At any one point, one may, for a while, be an observer, and at another moment, the experience-initiator of any "episode", or the taker of any role which may be necessary for a further development.

Picture 7: "Creative Events" - An Integrative Event includes all of the components (colours); all of the kinds (varying shades*); all of the phases (layers, depths); and all of the levels of "unfolding" (movement, dynamics). It is planned, performed and assessed with the aid of the spaces of "Everywhere" and some aspects of EDCOM presented here as images derived from thirteen dimensions: the emotional ("Spirals"), intuitive ("Flashes"), practical and technical ("patterns"), humouristic ("waves"), imaginative ("Horizons"), Personal ("Worlds"), Informative ("Pyramids"), sensoric ("Peaks"), intellectual ("Routes"), communicative ("Channels"), political and economic, ("Arenas"), reflective ("Sanctuaries"), cultural ("Transitions") and an empty space for additional dimensions.

There are of course many ways to make good use of our resources - the "routes", "patterns", "spirals" etc. - in a transitional culture, while at the same time improving and clarifying these resources themselves. Theoretically there is a possibility of working on one topic by participating in all of the events all our lives. We actually reduce it to six kinds of learning-working on one problem/topic. That is, participating in six Events made up of combinations of the elements presented, so that one acquires a learning-orientation ("opening"), learning experience, the ability to reorganize the old and the new ("Mediating"), awareness, improved knowledge or product, and integrated functioning ("concluding"), developing all the time.

In addition to such heuristic approaches, there is a systematic tool for going about the planning of an event. This is called "Educational Combinatorics", or EDCOM.

^{*}This version of the events contains three "structures" and three "kinds", which were subsequently combined to form the six kinds of Events.



Picture 7 - Contive Events

IV Educational Combinatorics (EDCOM)

The idea for EDCOM arises from the following: Education is a "mission impossible". At its best it is no more than a relatively successful selection and implementation of a handful of variables from among the scores of hundreds of considerations and combinations that would have to be included if we were not to impair the growth of others and ourselves. If we contine to "educate" in the way we do now, in the face of the enormous and continually changing and expanding range of sensitivities, knowledge and skills necessary to "design", "teach" and "train" for almost every human enterprise, then we will have rendered "educative functions" obsolete. Education as an institution seems to be unable to take into practical consideration either the factors pertaining to the uniqueness of the individual, or some of the most important technetronic factors pertaining to mass culture and its powerful media.

EDCOM, as a very borad "taxonomy", begins with a systematic but flexible classification and categorization of most of the important factors which relate to human interaction, particularly to education in its broadest possible sense. Its aims are:

- a) To provide a map of the significant variables and their combinations, which may arise in any "educative" situation.
- b) To become a means of selecting, ordering, inter-relating, controlling and evaluating whatever factors are required or missing in the transformation of a (potential) "learning opportunity" into an (actual) "learning event".
- c) To encourage the personal use of parts of, or all of, the system, to create new constellations and new ideas for C.S.E.

EDCOM is thus an intellectual and technical structure which can exist in the mind as a model, on paper as a checklist, matrix etc., or as computer programs of different levels of sophistication. It is a many-layered organization, consisting of more than two thousand variables classified in nine groups:

- 1) Personality and Society factors.
- 2) Objectives (collective) and Purposes (personal).
- 3) Contents and Aspects of the educative process (see picture 7 for some "Aspects", or "Dimensions", as they are called in this picture).
- 4) Methods, Techniques, Aids.
- 5) Time (when and for how long).
- 6) Space (location, "environment"....)
- 7) Educative or Motivational Forces (the persons, places, media or whatever from which the process originates together with the interests, desires and inclinations of the person or the group participating in it).
- 8) Evaluation and Research, including criteria, instruments, modes of measurement, etc. (see picture 4 for one example, the grid of assessment.)
- 9) Constraints and Limitations. (See picture 11, frame number 1 for some factors infringing on our lives). *

C.S.E. regards "constraints" as a challenge, and tries whenever possible to transform them into "Educative or Motivational Forces". This is one manifestation of optimization, which is C.S.E.'s ultimate aim. Each category of EDCOM also contains some imaginative or even "wild" variables and rules (requiring daring, intelligent improvization and low probability combinations), in order to facilitate the production of "impossible" ideas and considerations.

^{*}A complete definition of EDCOM could make a whole new kind of dictionary for the Social Sciences.

V "Vital-Self-Instructions" (V.S.I.)

In order to reduce some of our dominant heteronomous modes of life, and to halt some of the computer-like patterns of our behaviour, whether these originate from biological, economic, ideological, professional or mystical programmers, we must learn to instruct ourselves when and how to start, stop, prepare, continue and change. These abilities to originate, adapt and use V.S.I. are a prominent element in any operational definition of autonomy. But V.S.I. are not a panacea of C.S.E. Everyone needs the ability to develop - at least partially - a cipher to encode and decode what is happening inside and outside oneself.

All of us already use V.S.I. in the form of a common repertoire of directives, maxims, formulae, and even "charms", together with personal, and to some extent idiosyncratic, orders, guides and habits that may be activated verbally, kinetically, visually, or intuitively. Since people perceive their egosphere and sociosphere in different ways, and use many terminologies and different sets of values, the variety and number of V.S.I. is enormous. In order to increase awareness and to bring the use of V.S.I. under volitional control, we have found it convenient to present them in eight sets:

- 1) <u>Survive</u>! that is, all self-instructions pertaining to the most fundamental functions in all areas: physiological, psychological, social, cultural, political.
- 2) Start! All the instructions that deal with when, where, and how to begin working, thinking, reacting, initiating, etc.
- 3) <u>Continue!</u> All the instructions that deal with ongoing functions, whether stable or unpredictable: self-encouraging, intensifying, loosening up, modifying or interacting etc.

4) Stop! All the instructions that deal with how to bring things to an end (and not just let them die out or dwindle away) such as concluding, using feedback, postponing, resigning, etc.

We can consider these four V.S.I. as first order instructions. They are elaborated upon by further higher orders and sets, such as the following:

- 5) Prepare! All the instructions that deal with getting emotionally, practically, intellectually ready: self-persuasion, planning, collecting, organizing, etc. So we have: prepare to start, prepare to stop, and so on.
- 6) Improve! All the instructions that deal with cultivating skills, refining tastes, increasing awareness, etc., so we may learn to improve our ways of surviving, starting, continuing, stopping, and preparing.
- 7) <u>Integrate</u>! All the instructions that deal with combining, synthesizing, increasing our well-being and joy in life, autonomy and meaning, and coordinating the other kinds of V.S.I. (including the "improvement function" itself).
- 8) Produce Meta-Self-Instructions! All the instructions that deal with discovering new V.S.I., inventing one's own way of inventing (or at least adapting) new V.S.I., finding new ways and kinds of integration, creating new kinds of orders to enhance C.S.E.

Picture 8: "Vital-Self-Instructions"- The eight classes of V.S.I. (No. 4 "Do, Experience" in the picture is "Continue!" in the text), are depicted on the background of one integrative event called "set out!" (worked out by 40 experts and teachers in the course of a whole year.) Some specific V.S.I., derived from all these classes, were learnt and used in many ways by each of the participants, while setting out physically ("journeys"), emotionally ("trips") and symbolically (new "ways of life"). People coped with practical problems, personal hardships, language barriers - both concrete and imagined - in various sociospheres and ecospheres. Amongst other things, they learned to decipher and encode what was going on (as well as what had happened, and what might happen); gave themselves survival, preparation ... V.S.I. Sometimes these led to amazingly simple and important inventions or at least practical solutions.



Picture 8 - Vital-Self-Instructions

Only at the end of the year did we encounter a significant amount of Meta-V.S.I. being produced. However, the ability to transform abstract "Ingetrate" V.S.I. into specific instructions, (with the aid of the other kinds of V.S.I), aimed at enabling one to better integrate one's experiences, was still a rare phenomenon. In this concrete outdoor event, one meaning of "integrate" would be the fusion of egosphere and ecosphere; and one of the intellectual manifestations of this would be the overcoming of compartmentalized views of nature supplied by the Arts or the Sciences, though this integration could only take place after some of their special perceptions or precisions had been mastered.

The V.S.I. are learnt while "travelling" in the spaces of Everywhere, engaging in Creative Events, considering how to apply EDCOM, and making use of all of these in the Spheres. The Creative-Self-Educated person is one who uses less and less slogans, complies with less and less arbitrary orders, overcomes the programming of brain and self by others, and produces more and more Vital Self Instructions, which are applied by her or him as an unfolding personality in real life situations.

VI "Unfolding"

The process or dynamics of C.S.E. is called "Unfolding". It may be summarized as the gradual (or sometimes not so gradual) unfolding of one's being and the optimizing of any preferred mode of functioning. This may be depicted as a cycle of four "stages": beginning as "Robot", continuing as "Apprentice", reaching the stage of "Expert" (at least in some domains) and then culminating with "Creative Person" (at least in one realm). Each of these inter-related "stages" has many "sub-stages". (In picture 7 we see a partial illustration of how these stages form part of a Creative Event by being related to the various slices that make it up.)

Developmental theories (of physical, intellectual, emotional, moral, linguistic and artistic growth) are important to "unfolding", but often not enough for our purpose.* The same applies to the historical approaches so prominent in Western thinking. Most theories are culture and age dependent. Even if we are able to place or locate someone in a specific "stage" or on a "level of mastery" there are still hundreds of variations

they are even missing a g we need "technological growth",

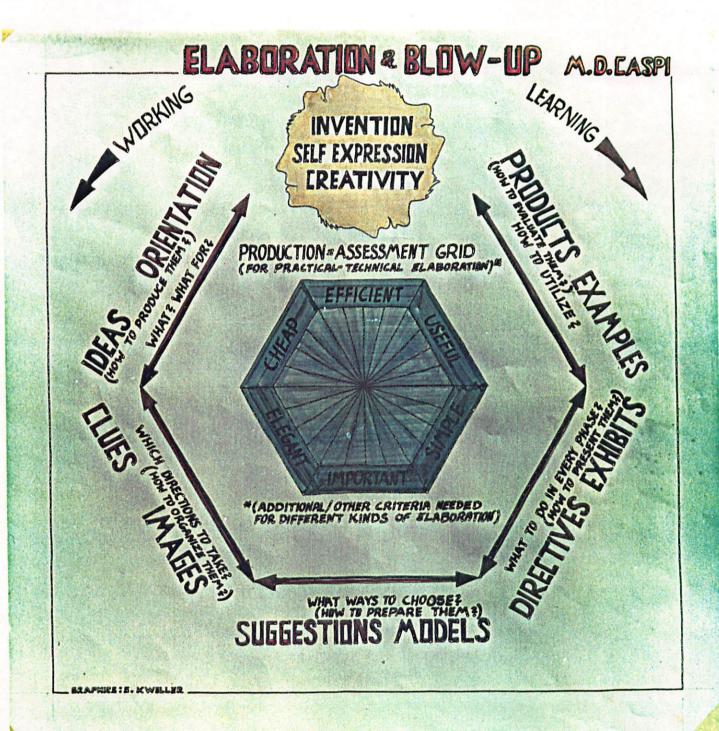
in one's functioning at that "level". The historical approaches tend to belittle the functional-present so crucial in C.S.E. We need to know what a person is doing/undergoing <u>now</u>. To enable us to describe this "functional-present" and make it more easily understandable, we suggest the "Robot - Creative Person" designations, as a wide spectrum of possibilities in the working-learning process, without making sharper distinctions than necessary between them.

Picture 9: "Training and Practical Guidance in Unfolding" -Two elements of this "functional-present" (a possible context for the "robot - creative person") are represented in picture 9, including, in the centre, the Production-Assessment Grid (which appeared in Picture 4). The stages of "training" (in the picture, "working" - blue arrows and questions in brackets) and the equivalent stages of "Guidance" (in the picture, "learning" - red arrows) could be regarded as analogous to the "Unfolding" stages. The five sub-stages of either "Guidance" or "Training" are developed in "Everywhere", that is, "Ideas", mainly in "fantasy"; "clues", mainly derived from the "past" and "present" spaces; "Suggestions" from the "elaboration" space. The "assessment" of the tangible products is undertaken in the "Present" space. These guides may be used in many ways: when they are used as "study cards", for instance, one might have at one's disposal five cards: "Orientation" or "Ideas" (1 - 2 "policy" lines), and if these are sufficient one starts out without needing the rest. If one needs more clarification, there is the "Clues" or "Images" card (3 - 5 "strategy" lines), and so on. This process is similar to "Treasure Hunt": Learning consists of getting less and less outside instruction. Everyone may start from wherever s/he wants. "Working" with the aid of "training", "learning" aided by "instruction", and "unfolding" itself all culminate in "creativity", (and in "working"'s highest manifestation -"Invention", and "learning"'s - "self expression")

With some effort these "external" systems of "Training" and "Guidance" with their production (performing)-assessment grids (in this case, one suitable for engineers, architects and artists) can be "internalized" and become part of our vital-self-instructions, facilitating our unfolding.

The Robot

One could also call this stage "Novice" (an informational connotation) or "Slave" (a social-emotional connotation), etc. We use "Robot" (a motoric-technological connotation) for designating this stage in all its aspects.



The "Robot" has no degrees of freedom. It is activated by "external" orders, and is limited to executing its in-built instructions mechanically. The repertoire of skills and information is specific and rigid. It has no responsibility in the usual sense of the word. When activated, it must have concrete "Examples" and fully specified "Directives".

In consequence of the above, the Robot-Person seems to be lifeless, not very communicative, out of place in many Spaces, etc. This stage is perfectly natural in a beginner. Regarding the student as a Robot was the preferred approach of traditional education. Modern methods have tried to avoid the Robot altogether, and when they have failed, they have regarded the student-Robot as a poor learner. We try, deliberately, to encourage our Robot behaviour at each and every kind of "beginning" in order to reduce anxieties concomitant with the new, to relieve the burden of responsibility and, in the long run, to get rid of the Robot within us, by acting it out.

The Apprentice

After one has tasted the new, and rid oneself of the major novice-Robot-slave-type characteristics, one may choose between several options (some degrees of freedom). We try to experiment, to use feedback, to ask simple questions, and to utilize some of the answers. With increased confidence, wonder, curiosity and inquisitiveness may arise. One starts, often wrongly, to reorganize, and to move from the juxtaposition of the new and the old. At times the Apprentice looks awkward, clumsy, "stupid", quarrelsome - but on the other hand one might be delighted, enjoy the "action" with hope, and offer cooperation.

In addition to using "Examples" and "Directives "(Robot stage), one is now capable of making use of "Suggestions", that is, one is able to assimilate some incomplete outside information and combine it with one's own resources.

It is not implied that everyone must perform, or actually pass through, the same rituals in the same order of sub-stages on the road from Robot to Creative Person. Individual differences are so vast that in order to incorporate them it is necessary to use the millions of possible combinations within the Spheres, Spaces, Events, and V.S.I., which are suggested and described by EDCOM,

Expert

This stage includes all of the sub-phases from the "Expert-Robot" to the "Professional-Expert" (a generalist with a varying degree of expertise in a huge, broad and flexible range of fields, so necessary in our changing civilization).

At this stage one has undergone some personal changes (for better and for worse, if we must evaluate). One is functioning in one's domain of mastery on the basis of highly selected information, rigorous techniques and criteria, well-formed principles, and a relatively clear theory. One is fully responsible for one's actions, skillful, exact, fast, assured and efficient. But, of course, one may also be dogmatic, automatic, formalistic, conceited, and narrow-minded.

The Expert scans and scrutinizes "Examples", "Directives", "Suggestions", but also elaborates "Clues" (strategies) presented or discovered, and performs the designated tasks by ascending from the most concrete "Example" to the most abstract "Orientation" (a wide view, or policy) which can direct planning, execution and evaluation, and then redescending to the concrete facts.

In Education, Industry, and the professions, this level is considered as the highest. Its drawbacks and dangers are ignored, and the possibility of a still higher level of personal and social functioning is not considered.

The Creative Person

Here, the whole person is present, and working/feeling/thinking are integrated. One is able to transform "opportunities" into reality. One satisfies one's personal interests and deepest motivations, while becoming more and more aware of what is going on (inside and outside); one's senses become sharper, one's performance becomes more skillful (elaboration of the Expert's level); there is flexible and innovative use of marginal information (in addition to the focal one), so that serendipity might occur because one is ready for it; there is a constant flow of greatly valued and sensitive feedback; and one creates something original, valuable, true, and often elegant, which has implications and repercussions in both the egosphere and the sociosphere.

The range of creative functioning is almost unlimited. One well-known hierarchy starts with "expressive", incidental creativity, (like that of a child) and reaches the highest levels of "emergent", rare creativity.

The same applies to different types of creative people. In C.S.E. there are between 15 and 20 basic types, such as: the idea person; the interpolator and extrapolator; the applier/elaborator; the integrator, etc.

Considering the variety of ways in which each of them starts, continues and stops, (to use but a few of the V.S.I.), the theme that s/he is working on, the variety of the media with which they work, and their interaction with other C.S.E. components, it is clear that we have to knock down the stereotyped set of characteristics of creativity applied by different schools (maybe we should use the term in the plural, and talk about "creativities".)

Of course, this level also has its dangers, like pseudo-creativity ("revolutionary anti-everything", "sensationalism"....). Most creative persons are aware of some of their limitations, e.g. in some fields they might be "Robots", in others, "Apprentices", etc. This recognition does not reduce their power to be creative. Sometimes it even invigorates them.

At any given moment, we function on several levels simultaneously. The phenomenon of "streaming" in all the Spheres, producing new ideas, models and products in Everywhere Spaces, engaging ourselves originally, whole-heartedly, intellectually, physically, practically, in important and personally valuable Events, directing one's life with relevant, fruitful V.S.I. and using EDCOM in new ways - is a rare one. But it is not impossible.

Implicit in our methodology is the fact that everyone, at all times, and everywhere, may be encouraged to function in a more integrative way on most levels; in at least one area of interest as a Creative Person; in at least two as an Expert; in most realms as an Apprentice; in a minimum number of realms as a Robot; and in all of one's spheres of life as a person producing, organizing, using and enjoying "Examples", "Directives", "Suggestions", "Clues" and "Orientations" that help one to unfold as a human being, realizing more of one's potential, the upper limits of which are still unknown.

VII An Example of Using C.S.E.

Picture 10: "Writing a Program (P)" is an illustration of how one can make use of all C.S.E. components.

In one sense, the whole of C.S.E. methodology is a potential meta=program for a wide range of software, plans and actions, for various "target audiences" (potential users), mainly oneself. This picture, rather than trying to represent a complete system, presents a particular case of C.S.E.'s components being used for "Teaching" or "Training". It consists of several linear instructions (not to be confused with V.S.I.) surrounded by six "images" which have a double function: to remind us that not everybody relies only, or even mainly, on words, and to provide a mnemotechnical device for those who prefer images, tools etc. to abstract concepts.

This "program" is intended to be a C.S.E.-Program, which is an intermediate step between a complete set of information and instructions and the personal process of "self-programming". The program starts as a set of instructions concerning some alternative ways of doing something which is supposed to satisfy the need which motivated one to start the program.

As the "program" develops, these instructions are gradually replaced by V.S.I.s. The number, kinds, degree of organization, modes of symbolization etc. of these V.S.I.s may vary according to "EDCOM"'s considerations.

We choose to begin with EDCOM, C.S.E.'s most systematic component. Its "factors" ("personality", "objectives"...) are elaborated by the other components, each in its own way. One may, of course, start equally well with any of the other C.S.E. components. With increased experience in "combinatorical thinking", (in simple terms, the ability to simultaneously use variables from different C.S.E. components), we would be able to write a better and more flexible program. This, among other things, would simulate more reliably the quite complicated, non-linear and personal process of writing programs. For the sake of convenience, we have kept the same order of components, with each one appearing twice: the first time as a stimulus for the "programmer", and the second time as a stimulus for the potential program user. There follow a few examples to enliven the schematic instructions and a few clues about the "images" appearing in the picture.

The first dotted line in the picture might be filled in thus: "Clarify P!" (analysis of P.'s subject-matter, prerequisites, etc.); or: "Choose how to start!"; or "Decide which sphere and/or space you are in now!" or any other first meta-instruction concerning mood, language, approach, aims etc. of the programmer. These and other decisions depend, on the one hand, on the nature of the program and its aims, and on the other, on the user's needs and interests. Taking such decisions is one step towards overcoming "external" programming.

"Scanning EDCOM" may result in the simplest questions being raised, e.g. "For whom?" "What for?" "What basic elements and relationships should be included?" "How?" etc. (these questions being one partial rephrasing of EDCOM factors: "Personality/Society", "Objectives" and so on). One might go on using "combinatorical questions", leading to assumptions and hypotheses about levels of "Unfolding" and ranges of "Spheres", both being extensions of "for whom?", e.g:

"If topic X can be dealt with by approaches $Y_1 - Y_n$, which one would be preferable for "target audience" Z if its entering "profile" is:

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on the "Robot" level - follows instructions (+)....(-)....(\pm); on the "Apprentice" level - is capable of motivating oneself for short periods (+)....(\pm)....(-); on the "Expert" level - is critical (+)....(-)....(\pm); on the "Creative Person" level - tends to be "original" at all costs (-)....(+).....(\pm)?
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Or: "With regard to problem B, most people tend, at the end of P, to live in "Spheres" which are simultaneously:

Is this the case here? How can I find out within..(time, effort)?"

We cannot, here, go into more detail concerning the written part of the picture, but shall concentrate, rather, on the illustration.

The computer on whose screen the "program" is "printed out" in the picture, is, itself, a natural associate of the "program", although we by no means limit ourselves to this type of association. Since EDCOM may have similar external characteristics to a computer program, some people like this analogy of EDCOM \approx "COMPUTER" with its connotations of logic, systematics, even "mathematical" features... Others might prefer "calculator", "slide rule", "calender", while there are those who would rather something which must be used imaginatively and daringly, if we want to implement the multiplicity of considerations involved.

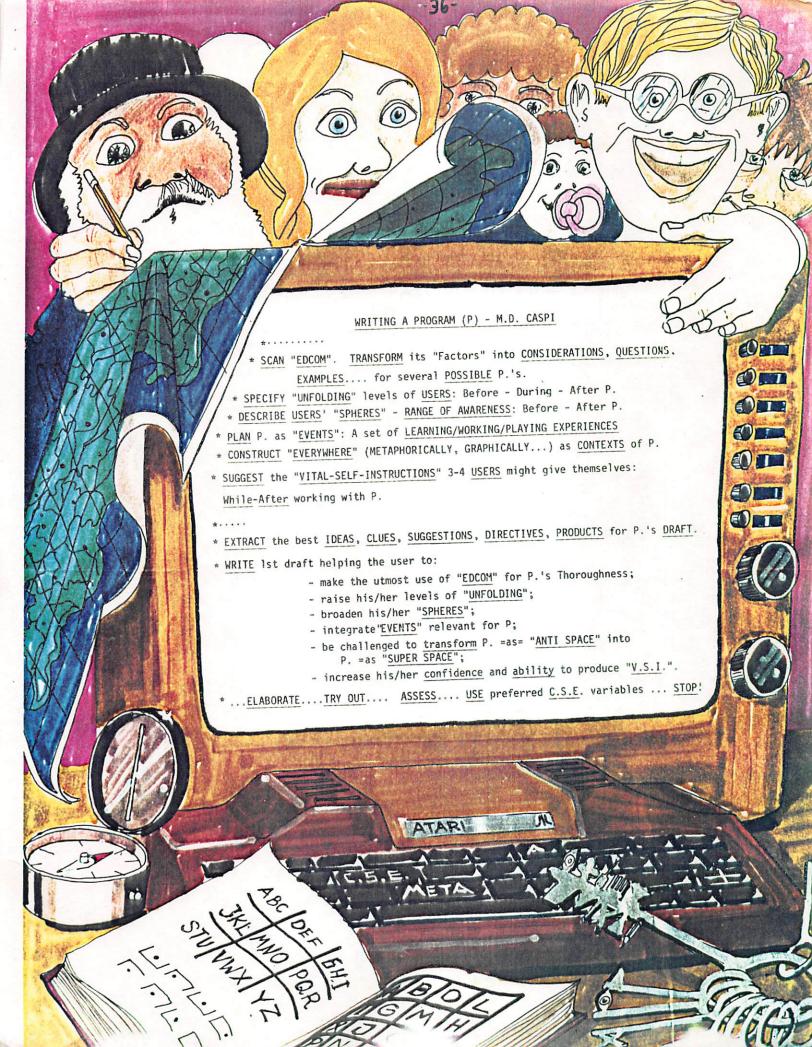
Beneath the computer there are "keys", the simplest "space" openers. "KEYS" = "EVERYWHERE" have different shapes, and each space has its own key, as well as being accessible through a master key. "Everywhere Keys" may imply responsibility, as well as the actual manual work involved in "taking care of" a place, as a job. Others may associate the spaces with designing, construction, engineering, ... economics, administration, and other practical ideas. Some people may connect them with playing hide-and-seek, resting... magic.....

Next in the picture there is a code book. Does it refer to the "EVENTS"? or rather to the "V.S.I."? 'CODES" may conjure up associations of secrecy, pre-arranged plans, context, hard work (deciphering).... By changing the image but not the word, one could have moral, medical, legal discourses, etc. about "V.S.I.", as well as intuition, idiosyncrasy....

Maybe the Compass (or "compasses", since there are several kinds of "North") is more closely related to "Events" - or maybe to "V.S.I."? Compass: Orientation (the first kind of "Event"), life-saving in an unknown territory (V.S.I.s: "Survive!"), consciousness (the "spheres"?) exploration ("Future" space? "Fantasy" space?...) etc.

Then we have a MAP_≈SPHERES? "Spheres" may be discussed in poetical, noetical, mystical terms, but also psychologically, geographically, astronomically... In each case, one would adapt other analogies, metaphors, signs....

At the top of the picture there are faces. If one prefers the concrete, Faces might connote "Unfolding"; If one likes a more abstract related image: "Profiles" "Unfolding" (without necessarily reminding us of a police investigator compiling a "Profile"). Faces are subject to change, whereas profiles are more constant. Life being what it is - i.e. life just is - we impose on it aims, values, directions, ideologies. Is not our "Unfolding" merely a working hypothesis? Or just wishful thinking? Is it a living philosophy?... or a piece of psycho-cultural science-fiction?.... If "faces" (or even "profiles") are accepted as one of its symbols, they surely present a more positive approach to life than the "dark forces" in picture 11 (first frame).....



VIII Towards Realization

One can arbitrarily divide the idea-practice-experience of C.S.E. into the "social" (society's efforts to implement this methodology in institutions, communities....) and the "individual" (one's efforts to start C.S.E. and continue it),

It may be quite utopian to hope for the construction of all the spaces of "Everywhere" in one centre, for the experiencing of all the "Events" etc.... and therefore it is challenging!

Establishing "Everywhere" from somewhere or nowhere; participating in "Events" instead of living a routine life; regulating our destiny with V.S.I. by overcoming external programming; expanding our "Spheres" by penetrating new borders; using EDCOM considerations and reducing the number and power of dogmas and shallow thinking; and "Unfolding" all the time (overcoming imaginary homeostasis) - all these are life-long challenges.

C.S.E. is open to everyone, of every age, everywhere - to individuals, families, firms, vocational organizations, or scientific or artistic institutes.

Trying to discover more about our "Growth Imperative Quotient" (a possible alternative to intelligence quotients, and many other specific quotients) and modes to enhance it is a continuous task. C.S.E. is one way to go about it. You may start with several Spaces. Or you may begin with one Event. (It is not advisable to start with all the facets and aspects.) The act of choosing where and with what to start has an inherent value: Do you prefer the verbal? the motor? the dramatic? the technological? the architectural? the musical? the gastronomic? the mathematical? the scientific? the theraputic? What kind of considerations would you prefer?....

Wherever you start, and whatever mode/aspect you choose to begin with - it does not matter which, since this is an organic system - many challenges always remain. The fluctuations between the "constant" and the "changing", the "external" and the "internal", the "new" and the "old", the "theme" and its "variations" - ensure that whenever old challenges are met, new ones are ready to arise.

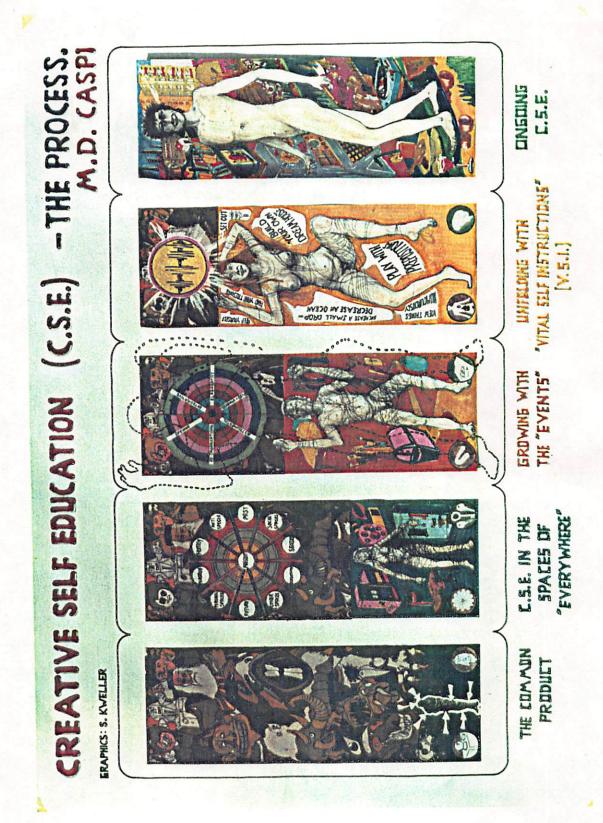
The question of how one starts to work creatively to construct one's own version of C.S.E. on the basis of a theoretical, as well as a personal background, is dealt with in each part of our methodology which is, as we have said, a transitory/mediating approach.

Picture 11: "C.S.E. - The Process" - Some romantic-radical theoreticians might urge us to look at this picture from right to left, implying that in the beginning (in each generation) there is the free, natural person ("Ongoing" reducing). Then one gets "socialized" in the family (forgetting the "V.S.I.") and tied up in various strings. Later on one becomes more oppressed ("Events" = traumatic experiences at school and in the work-place) with a "schizoid" break down (small figure and dotted, unrealistic figure). One's body gets entangled with troubles, distorted and shrunken. ("Everywhere" becomes a narrow egosphere); and lastly, completely covered in armour, detached, reduced to a mummy ("common" living).

Now, if we are flexible enough, and still have some energy left, we are encouraged to look at the picture with an optimistic eye, starting, as is "common", from the left: viewing with indignant criticism what "society" is doing to us (little parcels tightly knotted by cultural patterns, with powerful, mysterious and mischievous dragons, forces, wise old men, etc. playing tricks on us). Then, with the emergence of C.S.E. (or similar approaches) one loosens up, stretches, and sees some of the possiblities of living "Everywhere". One continues to grow and liberate oneself from all kinds of burdensome ties, superstitions, prejudices, fears, etc. and participates (as Robot, Apprentice....) in many kinds of experiences ("Events"), some of them dramatically larger than life (dotted figure) - helping one to enlarge, enrich, and strengthen one's own egosphere as well as all the other spheres. When we reach the stage of being able to guide our own lives with Vital-Self-Instructions there hardly remains a "background" (upper, dark part of the 4th frame being dominated by vibrating life rhythms). Then we reach the fusion and integration phase, fully functioning, without visible scars or ropes around us. But (since the little, wrapped up person, from the first frame, might still reside in us) we continue our Creative-Self-Education... ... a more relaxed and expressive figure would belong to a fifth stage, not included in our picture.

It is now up to you, the reader or viewer, to give yourself some self-instructions concerning, say, how to interpret this picture.....

* * * *



Summary of C.S.E. Components

"Spheres": Egosphere, Sociosphere, Ecosphere, Cosmosphere.

"Everywhere": Fantasy, Elaboration, Senses, Planning, Excavating

the past, Updating the present, Projecting the Future,

Social, Personal, Other Spaces, Anti Spaces → Super

Spaces.

"Creative Events": Opening, Instrumental, Reorganizing, Awareness and

Feedback, Optimizing, Integrative.

"Educational Combinatorics": (EDCOM)

Personality and Society factors, Objectives and Purposes,

Contents and Aspects, Methods, Time, Space, Motivational

Forces, Evaluation and Research, Constraints.

"Vital-Self-Instructions": (V.S.I.)

Survive, Start, Continue, Stop, Prepare, Improve,

Integrate, Produce Meta V.S.I.

"Unfolding":

Robot, Apprentice, Expert, Creative-Person.

All the components are interchangeable: rearrangements, exclusions and inclusions depend upon the needs and interests of the person/group using them.